PEDIATRICS

UNDER THE CHARGE OF

THOMPSON S. WESTCOTT, M.D., AND FREDERICK O. WAAGÉ, M.D.,
OF PHILADELPHIA.

Communicability of Poliomyelitis.—KERLEY (*Arch. Pediat.*, 1917, xxxiv, 32) offers interesting observations bearing on the questions of the transmissibility of the disease by the diseased to the unprotected individual by human contact; the part played by the innocent in the transmission of the disease, and the proportion of healthy children who are susceptible. The following facts have a striking relation to transmission by human contact: There were no cases of the disease on Governor's Island, New York, during the recent epidemic. There are about 80 children on the island, and a strict quarantine of children under sixteen years was maintained throughout the epidemic. There were no cases on Barren Island, with 350 children, in a population of 1500 people. The geographical and social isolation of this community can be considered responsible for its immunity from the disease. Among the 21,746 children in 93 institutions under permanent jurisdiction of the Health Department of New York City, but 10 proved cases developed. Three of these developed within two weeks of their admission to the institutions and three others were allowed to mingle with city children in a public park. This low morbidity is to be ascribed to the strict quarantine established in these institutions by the Department of Health. The conclusion being safe that the disease would spread along the lines of human travel to isolated sections, the author thoroughly investigated a number of first cases occurring in isolated communities in northwestern Connecticut, in which the disease had not been known to exist for a period of ten years. He reports 11 cases of the disease under the above conditions, and in almost all the cases it was proved that some person coming from an infected locality had come in contact with the case just previous to its development, the infection being borne by the innocent carriers. In 2 cases the disease was transmitted by coming in personal contact with children recently arrived from an infected locality who were at the time or quite recently ill from a condition not diagnosed as poliomyelitis but which was later shown to have been that disease in its abortive form. The author concludes as reasonable that poliomyelitis may be communicated through personal contact and that there are innocent carriers who spread the disease. Also, that but a small percentage of children are susceptible to the disease and that probably from 90 to 95 per cent. possess an immunity.

Some Clinical Aspects of Anterior Poliomyelitis.—MARTIN (*Canadian Med. Assn. Jour.*, 1917, vii, 113) states that recent observations and researches of this disease demonstrate the need of reconstructing our ideas of it. Epidemics show that even the very large proportion of the cases are not accompanied by paralysis. The disease appears to affect all ages and classes. It is essentially infectious and communicable, the virus apparently entering the body through the mucous membranes of the nose, throat, and intestines, and affects chiefly the nervous system. The mode of infection is undoubtedly by personal contact, and convincing evidence has demonstrated that no intermediate way exists. Flies and domestic animals do not communicate the disease except as passive carriers. Healthy, contaminated persons can carry the virus through the secretions of their mucous membrane. Many people have a natural immunity to the disease. The average incubation period is eight days. The prodromal stage if present shows indefinite body pains, fatigue and pressure or aching of the head. The onset shows a high fever of short duration and usually ending by lysis. The general symptoms are headache, vomiting, constipation, pains generally over the body but particularly in the nape of the neck. Stiffness of the head and neck, refusal to flex the chin on the breast. Hyperesthesia is characteristic and, as a rule, diffuse. Weakness, with flaccidity of the muscles, and drowsiness are characteristic symptoms. These symptoms may last from five to ten days followed by rapid recovery, when the case is termed "abortive." However, recurrence may follow with a subsequent paralysis. The various types of the disease are described, depending on the anatomical lesion in the nervous system. The abortive type comprises 35 to 56 per cent. of all cases, and is the most dangerous form from the point of dissemination of the disease. During epidemics every person with an acute infection is rightly to be regarded as a suspect.

Early Diagnosis of Pott's Disease.—TAYLOR and DARLING (*New York State Jour. Med.*, 1917, xvii, 51) impress the value of habitually thorough examination of children in illness in avoiding errors in diagnosis of this disease. Pott's disease is essentially a disease of childhood, 90 per cent. of cases occurring before the fifteenth year. It is desirable, if possible, to make a diagnosis before destruction of vertebræ or surface abscess formation occur. The disease develops more rapidly in children than in adults and abscess or deformity may appear in a few months. Among the earliest signs of the disease in childhood are general debility, slight anemia, failure to gain, lack of interest in play, tendency to lie down often, unnatural attitude, change in gait, night cries or paroxysmal abdominal pain or persistent attacks of pain in the chest or stomach. The child moves cautiously, leans on a table or chair at every opportunity and tends to walk on toes. These symptoms are suspicious. On inspecting the spine, if the lesion is cervical there may be unnatural posture of the head or supporting the chin with the hands when sitting. The most usual location of the lesion in children is the dorsal region and with this situation may be found elevation of one or both shoulders, rigidity of the spine when walking and placing the hands on the thighs to support the spine when sitting. A slight lateral curve may be seen. If the disease is lumbar there is exaggeration of the normal curve which throws the abdomen forward and the child characteristically squats instead of stooping to pick up an object. It may be possible to detect approximation of two vertebra